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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/523,056	03/10/2000	Marc Lamberton	FR9-99-008	4566

25299 7590 04/09/2003

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EXAMINER

NGUYEN, DUSTIN

ART UNIT	PAPER NUMBER
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2154

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DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/523,056	<b>Applicant(s)</b> LAMBERTON ET AL.	
	<b>Examiner</b> Dustin Nguyen	<b>Art Unit</b> 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 August 2001.
- 2a) ☐ This action is **FINAL**.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some \* c) ☐ None of:
    - 1. ☒ Certified copies of the priority documents have been received.
    - 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### **DETAILED ACTION**

1. Claims 1-16 are presented for examination.

#### ***Specification***

2. The disclosure is objected to because of the following informalities:

Spelling error:

36uses - page 10, line 3.

36selects - page 10, line 17.

Appropriate correction is required.

#### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show items 201, 202, 205 and 206 as described in the specification on page 10, lines 3-5. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### ***Claim Rejections - 35 USC § 103***

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maciel et al. [ US Patent No 6112248 ], in view of Kawafuji et al. [ US Patent No 5999536 ].

6. As per claim 1, Maciel discloses the invention substantially as claimed including a data transmission system operable for transmitting packet data from an Internet Protocol (IP) host over an IP network comprising:

an IP layer [ col 7, lines 59-62; and claim 2, lines 21-23 ];

layer 2 network interfacing said IP network with a set of routers [ col 9, lines 37-60 ]; and

a Multiple Address Resolution Protocol (MARP) layer, said MARP layer between said IP layer and said network layer [ col 8, lines 25-36 ], said MARP layer operable for selecting one router of said set of routers in response to a next hop IP address [ inherently included in the IP network ] provided by said IP layer to said MARP layer when a packet of data is to be transmitted from said IP host over said IP network [ routing table ] [ col 8, lines 63-col 9, lines 30 ].

Maciel does not specifically disclose a network layer coupled to the IP network, wherein said IP host is coupled to said IP network via a layer 2 network.

Kawafuji discloses a network layer coupled to the IP network, wherein said IP host is coupled to said IP network via a layer 2 network [ col 5, lines 24-32 ].

It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Maciel and Kawafuji because Kawafuji's teaching would allow data to be correctly transmitted between devices to keep its integrity.

7. As per claim 2, Maciel does not disclose IP host is provided with an Address Resolution Protocol (ARP), said ARP operable to convert any IP address into a network address of a router to be used in said layer 2 network by mapping said IP address, in an ARP table into a network address of an active router selected from said set of routers. Kawafuji discloses IP host is provided with an Address Resolution Protocol (ARP), said ARP operable to convert any IP address into a network address of a router to be used in said layer 2 network by mapping said IP address, in an ARP table into a network address of an active router selected from said set of routers [ col 8, lines 52-62 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Maciel and Kawafuji because Kawafuji's teaching would provide a more user friendly technique since it is easier to remember IP address than network address.

8. As per claim 3, Maciel discloses wherein said MARP layer includes, a MARP table mapping said next hop IP address into a list of IP addresses of routers, said router addresses indicating routers selectable from said set of candidate routers [ col 7, lines 42-57 ], said IP addresses of said routers being mapped in said ARP table indicating active candidate routers able to be used as routers for transmitting said packet of data from said IP host to one or more of said workstations via said IP network [ col 7, lines 58-col 8, lines 14 ].

9. As per claim 4, Maciel discloses where in one of said routers is selected amongst said active candidate routers by using hash coding techniques based upon destination IP addresses, a pair of source destination ports in said packet of data to be transmitted, and said active candidate router IP addresses [ col 1, lines 52-col 2, lines 6 ].

10. As per claims 5, 6 and 7, they are method claimed of claims 1, 3, they are rejected for similar reasons as stated above in claims 1, 3. Furthermore, Maciel discloses list of active candidate routers determined before selecting from said set of routers [ col 8, lines 37-62 ].

11. As per claim 8, it is method claimed of claim 4, it is rejected for similar reason as stated in claim 4.

12. As per claims 9-12, they are product claimed of claims 5-8, they are rejected for similar reasons as stated above in claims 5-8.

13. As per claim 13, it is rejected for similar reasons as stated above in claim 1. Furthermore, Maciel discloses

a IP host [ 4a, 4b, Figure 1 ];

a Local Area Network (LAN) coupled to the IP host [ 6, Figure 1 ];

an IP network coupled to the LAN [ 1, 5, Figure 1 ];

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a set of workstations coupled to the LAN via the IP network [ 3a, 3b, 3c, Figure 1; and col 3, lines 56-58 ].

14. As per claims 14-16, they are rejected for similar reasons as stated above in claim 2-4.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (703) 305-5321. The examiner can normally be reached on Monday – Friday (8:00 – 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directly to the receptionist whose telephone number is (703) 305-3900.

Dustin Nguyen

  
ZARNI MAUNG  
PRIMARY EXAMINER